REQUEST FOR PROPOSAL

Date: 24 April 2024

Reference: RFP 2/2024

Subject: Redesign of trainer and participant database, including annual support

1. The United Nations System Staff College (UNSSC) hereby solicits your proposal for the above subject, in accordance with this document and annexes attached hereto. Proposals must be submitted to the UNSSC before **24 May 2024 by close of business in Turin, Italy.**

2. This request for Proposal (RFP) consists of this document and the following annexes:

   - Annex A: Requirements and specifications
   - Annex B: Terms and Conditions to Submit a Proposal
   - Annex C: Evaluation Criteria

3. Your proposal must include information in sufficient scope and detail to allow the Staff College to consider whether the proposer has the necessary capability, experience, knowledge, expertise and the required capacity to perform the work specified satisfactorily.

4. The UNSSC reserves the right to request from vendors additional information regarding their commercial activities, history and resources.

5. Your technical and financial proposal must be submitted via email to procurement@unssc.org**.** Non-compliant offers with the terms stated in this document and its annexes may be rejected without any evaluation.

6. Inquiries and clarifications concerning this RFP, along with changes or modifications to the proposals must be submitted before the deadline via email to **procurement@unssc.org.**

7. **Please note that the Staff College has VAT exemption status and can provide documentation for same. Hence, your pricing should take this status into account and be presented net of VAT.**

Introduction

The object of this request for proposal is to identify a vendor to redesign, amend and expand the features and capabilities of the current web application, used by UNSSC trainers, to register the information of trainers and participants in courses delivered globally.

The system, named "Trainers and Participants database" was developed in Drupal during the last 12 years and, although highly useful and functional, necessitates a comprehensive revamp to meet evolving needs.

The main purposes of the current system are:

- registration of courses delivered by UN Training staff to teach trainers
- registration of information about courses, delivered by said trainers globally to participants affiliated with various organizations.
- management of certifications attained by trainers, including tracking their expiration dates.
- generation of various statistical reports on courses conducted by the UN Staff and by trainers
- issuance of certificates in digital form (PDFs) to course participants

This application is private, accessible only from within the UN private network and reserved to the UN staff in campuses worldwide responsible for training of trainers.

Overview

The main deliverable of this RFP is a fully new, modern, web application, ready for the next years.

To achieve this goal we have identified 4 key areas for action:

- perform a **complete redesign of the user experience** and interface to ensure ease of use for all users, including those with minimal technical proficiency

- **migrate the old application and data** to a new application with a new user interface
- **deeply integrate AI (artificial intelligence) and NLP (natural language processing)** in the new application in order to facilitate:
    - data insertion, bulk data upload and sanitation
    - querying database for reports
    - getting reports in various formats
- make the application **interoperable** with other services within the UN network by exposing a set of server-to-server APIs.

Scope

The scope of this RFP is limited to the analysis and development of the new functionalities, as well as the implementation and delivery of the web application and related documentation.

All associated infrastructure costs, such as hosting and server expenses, domain name registrations, SSL certificates and the like will be managed by the UNSSC.

It is understood that any service costs incurred by the vendor during development (i.e., prior to the delivery in Sub-activity 2.4 as specified in the following timeline) are the sole responsibility of the vendor unless explicitly agreed upon with the UNSSC.

Supplementary expenses beyond the specified scope, such as licensing fees for software or internet services, are not covered by this RFP, unless they are clearly documented and justified, particularly concerning NLP/AI integration. If additional software or internet services for AI or NLP are required, these must be clearly outlined during Activity 1 and quoted separately in your proposal.

Additionally, a comprehensive breakdown of expenses that the UNSSC could incur over the next three years post-delivery must be provided.

Timeline

The first fully functional version of the working application must be delivered **by the end of 2024**.

In order to achieve this goal, special care must be taken to ensure the respect of these activities:

Activity 1: Initial Assessments and Design (2 months)

- Sub-activity 1.1: Assess the full specifications and functional requirements of the new web application with the Turin office of UNSSC.

- Sub-activity 1.2: Study and design a completely new user experience and interface.

Activity 2: Core Development and Data Migration (3 months)

- Sub-activity 2.1: Present the final user interface design to stakeholders for approval.

- Sub-activity 2.2: Design and implement the core functionality of the new system. These will be the same functionalities present in the current system

- Sub-activity 2.3: Migrate data from the old database to the new one, focusing on UN trainer information and adding UN identification numbers.

- Sub-activity 2.4: Release new website with old functionality migrated to new UI and new system.

Activity 3: AI Integration and Querying System (2.5 months)

- Sub-activity 3.1: Design and develop AI-based integration to facilitate data insertion into the database.

- Sub-activity 3.2: Design and develop the new querying system based on artificial intelligence.

Activity 4: Implementation and Testing (1.5 months)

- Sub-activity 4.1: Implement web interfaces allowing other services to query data within the system.

- Sub-activity 4.2: Perform thorough testing of the web server, web application, and staging application.

- Sub-activity 4.3: Prepare and deliver user manuals (and video manuals) for training on using the application.

- Sub activity 4.4: Deliver and publish final version of new website.

Technology and key-concepts of redesign

The UNSSC does not have technology preferences, thus allowing the vendor full autonomy in selecting the most suitable technology stack for the project.

The chosen technology stack for the development of the new web application must adhere to modern web standards and be suitable to build a responsive and user-friendly interface. It is imperative that the base technology utilized consists entirely of **open-source** code, adhering to permissible licenses.

Opting for open-source technology promotes interoperability and mitigates vendor lock-in, thus empowering the organization with greater control over its digital infrastructure.

One of the key objectives of this tender is to enhance accessibility and usability for a wider audience within UN campuses, so special attention must be devoted to facilitating effortless data input and database querying.

In order to achieve these goals, **natural language processing** and **artificial intelligence** must be integrated into the web app.

This means that the only exception to the exclusive use of open source code and service, if adequately motivated, could be the usage of commercial grade LLM or similar AI related services.

Deliverables

These are the expected deliverables:

- A fully functional **website** installed and ready for deployment in the production environment.

- Provision of a **staging site** for thorough testing and quality assurance prior to final deployment, which will also be used for testing future modifications.

- Setup of a **documentation micro web site** dedicated to **integration**, including comprehensive examples and instructions for seamless integration with existing UN systems.

- Provision of **web-based instructional materials and video manuals** to facilitate user adoption and training, ensuring users have access to clear and concise guidance on using the web application effectively.

Overview of the application

The application, designed as a web-based system, is to be tailored for use by UN trainers and personnel responsible for overseeing training activities.

Once logged in the system with appropriate credentials, users can access a variety of functions, each determined by their assigned permission levels (or roles). The application needs to support the following functionalities, many of which exist in the current system and must be maintained and upgraded.

- **Course Creation and Management**: Users can create and categorize new courses, either of type 'Training of Trainers' or of type 'standard courses' conducted by trainers.

- **Trainer and Participant Management**: The system allows for the uploading and editing of trainer lists for specific courses. Additionally, trainers can manage participant lists for the courses they deliver globally, specifying also details such as course type, location and date.

  Once a course has been delivered, each participant receives via email a PDF stating that they have participated in the course.

- **Data Import and Sanitization**: Operators can manually input trainers and participants one by one or through CSV file uploads. The system needs to address challenges such as data discrepancies, encoding issues, and organization name variations (e.g., different spellings or translations for the same organization).

- **Certification Issuance and Qualification Tracking**: Trainers that successfully complete a Training of Trainers course (ToT Course) get a certification or qualification. These qualifications are recorded, complete with expiration dates as per UN regulations, which vary based on the course type.

- **Certification Validity Rule**s: The application sets and enforces rules for the continuing validity of trainer certifications, ensuring compliance with UN standards. Certifications expire unless trainers meet certain criteria.

- **Expiration Alerts**: The system automatically notifies trainers when their certifications are nearing expiration, prompting necessary renewal actions. Typically, a certification has a limited lifespan and requires trainers to deliver a minimum number of courses during this period to remain valid.

- **Report Generation**: Users can access various reports in textual, tabular, and graphical formats. These reports provide insights on course numbers, certification statuses, and other relevant data for UNSSC. Reports are generated either through predefined analytical rules or via natural language processing queries.

- **API Integration**: Lastly, the system as a whole will feature a comprehensive set of APIs, enabling external services to query the database of courses, trainers and participants effectively.

The web application must be responsive, to be used effectively also on mobile, fully accessible and be presented in English.

Main entities involved

The foundation of the application (hence its current name) is a database of structured data and entities.

This section details the Entity-Relationship diagram of the main entities involved in the current database. Lookup tables and secondary, trivial entities are not depicted nor described.

Again we stress that these entities (and data) must be migrated (with possibly minor modifications) into the new application.
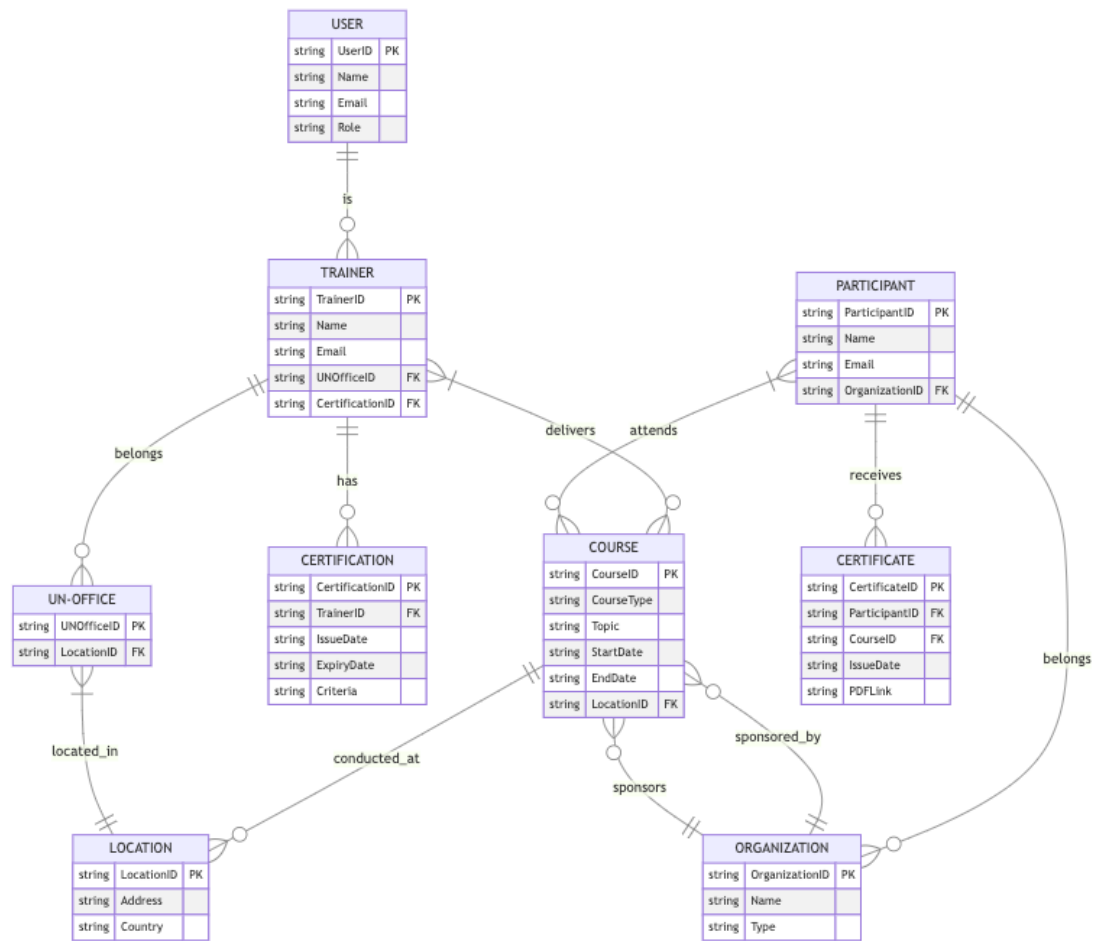
Users (app operators)

The system is a closed system that will be used only by UN personnel. There will be no self registration, but users will be able to log into the system only after having been invited.

Each user of the system belongs to one of these roles:
- **Super user**, the super user is responsible for the administration of the whole system and can perform any action on every data. Can perform maintenance and technical tasks to keep the system running smooth
- **Training supervisor** (aka manager), the supervisor is responsible for creating new types of data entities such as locations and courses, both for trainers and participants and for giving general rules to the system, for example, rules regarding expirations of certifications, etc.

> ○ The trainer supervisor can invite trainers to use the application
- **Trainers** have the ability to create specific courses that they will conduct, providing information on the location, date, and topic of the course. They can load participants for the course, adding them to the course roster. They can check the outcomes of their courses, and view the issued certificates.

Trainers

A trainer is an individual who has participated in, or is scheduled to attend, a course conducted by UN staff, specifically a ToT (Training of Trainers course).

This training enables them to subsequently deliver similar courses to the wider public.

Each trainer is also a potential User, meaning they can login and use the application if invited.

Each trainer's profile must be recorded in the database, along with essential details. These include the unique UN identification number (if available) and pertinent personal information such as name, current email address, possibly gender and date of birth, phone number, and the location of their current assigned UN office (duty station).

It's important that the recorded location aligns with one of the predefined locations in the system.

Furthermore, each trainer's record must include a comprehensive list of courses they have attended. Additionally, trainers should have an associated list detailing both their current and past certifications or qualifications obtained from these courses. This list should also specify the expiration date of each current certification.

Participants

A participant is any person belonging to the UN, NGO, or some other sort of governmental or non-governmental organizations who has attended or is about to attend a course delivered by a Trainer (see above).

Each participant must be recorded with a name, surname and email, the organization they belong to, the role within the organization and possibly (but not mandatory) other data (country of residence, residence at the time of the course, or duty station, if UN personnel).

Participants are mostly loaded into the system via a CSV file.

Organizations

Organizations represent various non-individual entities associated with participants of courses. Each organization is defined primarily by its name and is categorized into a specific type. These types are predefined and include categories such as UN agencies, non-governmental organizations (NGOs), private companies, and others.

Each organization belongs to only one of these types.

In practice, organizations are typically added to the system indirectly. Rather than being entered as standalone entities, they are usually introduced while importing participant lists for specific courses. This importation is often executed via CSV files.

Other Organizations are the one "sponsoring" courses delivered by trainers (see Course below). These are typically inserted one by one in the system, mostly by UN staff.

Type of course

Each course within the system, regardless of whether it's conducted by UN staff or trained trainers, is categorized under a specific course type.

This classification is defined by several attributes: a unique name, a succinct description, topics etc.

Courses delivered to Trainers have additionally linked a detailed set of guidelines dictating the validity and conditions of certifications (qualifications) derived from attending the course.

For instance, some course types might award trainers with a certification (or qualification) that remains valid for a period of two years. To maintain the validity of their certification beyond this period, trainers are required to deliver at least two courses to participants within those two years.

Courses

These are the actual courses held globally and encompass both Training of Trainers (ToT) and standard types of courses.

Every course is assigned a specific location, complete with geographic details like an address and coordinates. These locations may or may not be situated within UN premises.

Each course is furthermore defined by its start and end dates, marking the duration of the course, and is delivered by one or more organizations, both inside the UN and outside. This information must be recorded.

Additionally, the course includes a participant roster, which can be populated either manually, one participant at a time, or through bulk upload via CSV or Excel files.

Qualifications or Certifications for Trainers

When a trainer completes a Training of Trainers (ToT) course, they automatically receive a certification (or qualification). This certification comes with a specified validity period, which can be extended if certain conditions are met.

These conditions typically involve a timeframe within which the trainer must deliver a predetermined number of courses to participants.

Certificates

After successfully conducting a course, trainers allow each participant to receive a certificate of attendance in PDF format.

These certificates are also stored in the database, linked to the respective courses that led to their issuance, the date they were issued, and the participants to whom they were awarded.

Locations

Locations refer to the physical venues where courses are conducted and where trainers are stationed. Each location is defined by a specific name, address, geographical coordinates, and other pertinent geographic details, including the continent or continental region it belongs to.

In the future development of the application, careful consideration must be given to the categorization of locations into regions. It is crucial to use region names that are respectful and align with the nomenclature used by local inhabitants.

For instance, a location could be situated not only in officially recognized countries but also in territories or regions with limited recognition, such as Palestine, Tibet, or Taiwan. Addressing this sensitive issue will require further discussion and analysis with the UNSSC (United Nations System Staff College) team in Turin to ensure cultural sensitivity and accuracy in the representation of these areas.

Reports and queries

Currently, the system supports queries to generate reports with a limited set of inputs and criteria for filtering the database. These include the type of courses delivered, the geographical region of delivery,

specific time periods, the gender of the participants, the organization delivering (or sponsoring) courses, and many other such filters.

Usually the output can be then saved as a CSV or XLS file.

A key objective of this project is to enhance the reporting system by incorporating a natural language interface for inputting the query and some level of AI to display and organize the results in a useful and graceful manner.

This advancement will enable trainers and operators to input queries in everyday language and get various types of reports, both tabular and graphical without having to navigate multiple filters (on multiple pages), many dropdown lists and input fields.

For example, a user could ask, 'Show me all the courses delivered by women under 35 in South America during the last four months.'

Another example could be, 'Display a heat map illustrating the number of courses delivered globally between 2021 and 2022 on the IFAC topic.'

Automatic actions (email messages)

The application needs some means of automatically sending alerts and messages, directly targeting the relevant individuals. These messages are mostly of two types:

- Post-Course certification messages: Upon the successful completion of a course by participants under a certified trainer, the system will automatically generate and dispatch certificates to each participant. These certificates in PDF form will serve as formal acknowledgments of their successful participation in the course.

- Trainer certification expiry reminders: Trainers whose certifications are approaching expiry will receive timely email notifications. These reminders will not only alert them about the impending expiry but also guide them on the necessary steps to renew or extend their certification. The information provided will include where and how they can fulfil the requirements to maintain their certified status.

Manager will only receive aggregated notifications of these approaching expirations.

All notifications need to be sent via email, utilizing an email gateway provided by the UNSSC and whose credentials and details will be given to the vendor.

Main enhancement over the present application

These are the main enhancement required over the present application:

- **Completely Revamped User Experience:**
  The new application needs to undergo a complete redesign of its user interface, with a focus on simplicity and ease of use. The new UX and UI must follow the most modern standards and push the boundaries with integration with AI.
  This is particularly important to cater to trainers and UN offices globally, ensuring that the platform is accessible to everybody and intuitive for a diverse user base, even without technological knowledge.

- **Data sanitization and coalescence:**
  A significant enhancement involves the sanitization and merging of data imported via CSV files. This process will include basic sanitization of imported data (space removal, extra characters detection etc) but especially accurately linking participants to their respective organizations, even when faced with variations in spelling, language differences, or errors.
  For instance, different iterations of an organization's name, such as "Médecins Sans Frontières," "Medici Senza Frontiere," etc., will be recognized as referring to the same entity. Advanced AI algorithms can be utilized to facilitate this process. In cases where ambiguities cannot be resolved automatically, the system needs to present these instances to the operator for manual verification and correction.

- **Natural Language Processing (NLP) for Queries:**
  The application must incorporate NLP capabilities, allowing users to input queries in natural, conversational language and in a

centralized page (whereas now reports of different types are accessible from several different pages and sub pages).

This feature will make the system more user-friendly and accessible, especially for non-technical users.

As already stressed, this is one of the main goals of this tender, so special care must be given to this task. Further details are given in the next paragraph.

- **AI-Driven Reporting:**
  The new system needs to employ AI to enhance its reporting capabilities. Users will be able to generate reports in various formats, including tabular, graphical, and even geographical representations. This enhancement aims to provide more insightful, visually engaging, and comprehensive data analysis. This point is tightly coupled with the former regarding Queries, in fact they can be part of the same "solution" and are further detailed in next paragraph.

- **Interoperability**:
  A key focus will also be on providing a set of APIs to ensure the system's interoperability. The main goal is to make this application the "single source" of information regarding trainers and courses held and qualifications.

  The expected outcome is for other UN services to query this application for information on data regarding trainers especially.

  The key to query the information held by the application will be the UN identification number that is unique for every personnel inside the UN.

Querying and reports

Querying and reporting are a crucial aspect of the revised application, one of the points where much effort must be spent.

The new system needs to be designed to support two distinct modes of querying and reporting:
- an analytical mode via some guided forms (better organized than the actual ones) and

- a natural language processing (NLP) aided querying plus AI guided reporting mode.

These two modes will operate alongside each other to cater to different reporting needs.

The **analytical mode** (which can start as a better copy of the actual querying system) will use one or more guided forms, where operators will input/select among various filters to obtain the desired results and will be dedicated to generating 'official' reports.
This mode will ensure the production of analytically accurate data and will offer a predetermined set of display modes for presenting the resulting information extracted following the input data.

In contrast, the **NLP mode** will serve as a more experimental tool, allowing users to gather insights in a flexible and easy manner. However, it is important to note that this mode should come with a disclaimer. Users must be made aware that the results obtained through NLP queries are for preliminary insight only and should be verified for accuracy and completeness.

This advancement will enable trainers and operators to input queries in everyday language and get various types of reports, both tabular and graphical.

For example, a user could ask, 'Show me all the courses delivered by women under 35 in South America during the last four months.'

Another example could be, 'Display a heat map illustrating the number of courses delivered on SSAFE globally between 2021 and 2022'.

The system then needs to be equipped with basic graphic capabilities for plotting graphs and displaying data on maps, both for the analytical reports and for the NLP-generated ones. This feature would significantly improve data visualization and user interaction with the system.

In summary, these are the required enhancement over the current application:

- Natural Language Processing (NLP) Integration: Developing or integrating an NLP module that can interpret and process queries offered via text prompt in natural language.

- AI integration: integrate some sort of AI that will work on the query given in natural language, elaborate on the data maintained in the system database, and produce the output in structured form

- Data Visualization: this enhancement will rely both on traditional libraries and AI and will map data returned by queries (NLP or traditional) to graphical visualizations.
  This will enable the app to present its data in a more effective and pleasant way.
  This could involve selecting appropriate software libraries or tools that enable graph plotting and map visualization driven by AI models.

On top of that, the vendor must reconsider specifically the whole User Interface design for the querying and reporting section of the app, with a special regard to NLP input.
Everything must be user-friendly and intuitive and found in a specific section of the website.

Overview of planned activities and main points

As a help to the potential vendors, the UNSSC has detailed a typical breakdown of activities in order to achieve the goal in the designated time frame,

The selected vendor can take inspiration from the following paragraphs and propose a different breakdown, provided the first activity, deliverables and final milestone are respected.

Given the complexity of the task, the first activity must be without doubt the drafting of a complete functional analysis of the desired application.

Activity: functional analysis with UNSSC staff

The initial (and mandatory) task for the selected vendor involves conducting a series of interviews with UNSSC staff in Turin, Italy UNSSC offices.
The purpose is to thoroughly understand and document the existing system's functionalities and the detailed requirements for the new system.

This comprehensive assessment will form the foundation for designing the new User Experience (UX), which will be shared with the staff for validation before further development.

Activity: design of UX/UI

This task involves conceptualizing and designing a fresh User Experience (UX) and User Interface (UI), with a strong emphasis on responsiveness and user interaction.
The proposed UX design will be showcased to the UNSSC for evaluation and endorsement, utilizing digital design tools such as Figma.
Following approval of the UX, the subsequent step (concurrently with the following task) is to craft a new UI that strikes a balance between intuitiveness and aesthetic appeal, while guaranteeing a smooth and engaging user experience.

Activity: porting of core functionalities

Following UX approval, the primary implementation task is to rewrite and migrate the core functionalities of the existing system. This step is critical to enable a swift transition from the old database to the new system, minimizing disruption for current users. Core functionalities to focus on include user login and essential operational features.

During development of this task, the UI, which will have been approved by that time, will need to be integrated in the new system.

Activity: migration of old database and deployment

This task encompasses the critical process of migrating both user data and all existing data from the old database to the new system. The focus here is not merely on transferring data but also ensuring it is thoroughly cleaned and sanitized. This step is vital to maintain the accuracy and integrity of data within the new system.

Upon successful completion of this task, users of the current (old) system should be able to transition seamlessly to the new system without any interruptions to their workflow. It is essential to effectively communicate the switchover plan to all users, and provide them with essential training on navigating and using the new system.

Prior to the integration of new functionalities, the old website will be phased out. All users of the old application will be transitioned to the new system, which, at this stage, will replicate the functionalities of the old site, aside from the updated user interface.

As an important milestone, the new application – although not yet complete in its entirety – will be set up in its final operational environment. The necessary server infrastructure and any other requisite services will be furnished by the UNSSC, ensuring the application is functional and ready for its next phase of development.

This migration is a pivotal step, setting the foundation for the subsequent introduction of new features and enhancements in the application.

It is in all but name a deploy in production, so the usual care must be taken.

Activity: implementation of new functionalities

The development team will introduce new features and enhancements to the system. These should be aligned with the requirements gathered during the functional analysis phase and designed to improve efficiency, user experience, and overall system performance (for example during "traditional" reporting) .

The new functionalities will be implemented and presented to the contracting office in the "staging" environment, so as to leave the "production" environment untouched until final acceptance.

Activity: integration with AI and querying

The focus here is to identify and integrate the most suitable AI models for three main functions:

- data input and sanitization,
- natural language querying, and
- visualization of results in reports.

Given the project's timeframe, it's advised to adapt and extend existing AI models rather than developing new ones from scratch.

Activity: Interoperability

The final development task involves developing a set of APIs that the system will expose.

These APIs will facilitate read-only access to the database, ensuring data security and integrity. Alongside the API development, a technical documentation section is to be created and hosted on a small website. This (micro) site, linked to the main website, will detail the API interface, providing essential guidance for integration developers, with code samples and a testing ground for experimenting.

Activity: User tests

Throughout the various implementation phases of the project, it's crucial to prepare and conduct both unit and functional tests. These tests ensure that each component and feature of the application functions as intended.

Comprehensive tests of the User Interface (UI) should also be carried out regularly. This step is essential for validating the UI's responsiveness, functionality, and user-friendliness.

After the completion of these automated tests, the application should be in a state ready for the final stage of testing, which involves human interaction. These human-led tests will be performed by the UNSSC. In conjunction with this, the vendor and the UNSSC will collaboratively develop User Acceptance Tests (UAT). The UAT process is critical, as it determines whether the project has satisfactorily met its objectives and requirements.

All testing phases, including both automated and UAT, will be conducted on a designated testing environment (most likely the same staging environment) separated from the actual production environment.

Upon the successful completion of all testing phases, including the UAT, the application will be deemed ready for deployment in the production environment.

Activity: Final delivery

Since by this time the application will be already in use, this last delivery phase will be rather like an "update" phase in the lifecycle of the application. Nevertheless, it's a very important phase since at this moment the new functionalities will be public.

This process involves several key steps:

- Deployment on Servers: The updated application will be deployed on the production server infrastructure which, by this time, will currently be in active use. Care should be taken not to cause any disruption to the service, or to limit them to the bare minimum.

- Integration of External Services: Along with the application deployment, any external services required by the application (notably AI tools) will be set up in the new environment. This includes integrating APIs, third-party services, and ensuring that all components are functioning harmoniously within the application ecosystem.

- Launch of Technical and Documentation Sites: Following the application deployment, the technical site dedicated to interoperability and the documentation site will be launched. The technical site will provide essential resources for integration developers, while the documentation site will offer guidance and support materials for users.

Technical Requirements

The system has several specific technical requirements, in addition to the previously mentioned open-source criteria.

1. System compatibility: The system should be designed to run (also) on Linux servers.
2. Query export functionality: Every query within the system must have the capability to export data in tabular formats such as CSV and XLS for user processing.
3. Data import guidelines: When importing data via CSV/XLS, the system should specify necessary details and provide users with sample files to download and use as a starting point.
4. Certificate production: Certificates of attendance generated by the system must be in PDF format.
5. API Interoperability: The system's API should follow modern guidelines, exposing a JSON API over HTTPS. While a RESTful approach is recommended, it is not mandatory.

   All documentation of said interface and APIs should align with the OpenAPI version 3 standard.

Security requirements

The security framework for the system must adhere to standard best practices, particularly considering that the server will be hosted on the UN's private network.

It's important to emphasize that while the system does not store highly sensitive information, it does manage data such as names and email addresses. Therefore, a robust, standard level of security is expected. This includes implementing measures such as secure data encryption, regular security updates, and access controls.

Overall, the security approach should be thorough and effective, but aligned with the typical security needs of a system handling non-critical personal data.

For the API interoperability aspect of the system, a secure authentication mechanism is essential. It is recommended to implement an authentication process, potentially enhanced with a two-step verification using OAuth2 protocol.
OAuth2 provides a robust framework for secure authorization, ensuring that access to the API is controlled and monitored effectively and will enable secure, token-based access to the API, and from there to the data in the application, providing a balance between ease of use for authorized users and protection against unauthorized access.

Project documentation

As part of the project deliverables, comprehensive documentation must be provided to ensure ease of use and maintainability of the system.

This includes detailed technical documentation focusing on interoperability aspects, particularly important for integration with external systems.

Additionally, the main application must feature an online help section, equipped with concise user manuals and instructional videos. These resources must cover the most common operations, guiding users through the system's functionalities and features.

Furthermore, extensive technical documentation of the overall system must be prepared. This shall encompass a thorough overview of the system architecture, the technologies and frameworks used, setup procedures, and guidelines for basic maintenance and basic error recovery.

Maintenance and support

The system will require a comprehensive annual maintenance support plan, crucial for its consistent and effective operation.

The required support need to include:

- continuous monitoring of the system to proactively identify and address any operational issues, malfunctions, or performance dips.

- timely correction of bugs and provide the UNSSC assistance for navigating and resolving challenges within the system.

- regular application of necessary security patches to the software used in the application to prevent vulnerabilities and be in line with the latest security standards.

- signalling to the UNSSC when security patches or similar actions need to be taken to the hosting system (VM).
  This is because the hosting system will not be maintained directly by the vendor, but by the UN IT offices or their contractors.

- small "cosmetic" modifications to the application that do not modify its features but only its appearance.

If required, maintenance can also include wider user support (via email) offering guidance and help to users for their inquiries or issues.

Annual maintenance must be quoted as a lump sum and this quotation must be valid for at least three full years following the final delivery.

Submission of Proposals

Proposals must be submitted in English and shall be expressed in the form described in the table below:

PRE-REQUISITE	1. *Please provide **company profile,** clearly identifying the experiences that demonstrate expertise in the subject of this RFP.* 2. *Please provide a **certificate of incorporation.*** 3. *Please provide relevant certification to perform the tasks under this RFP, for example, relevant ISO certification.*
TECHNICAL PROPOSAL	1. *Proposed solution to the scope of this RFP.* 2. *Description of the technologies, approach to development and other technical elements to meet the requirements of this RFP.* 3. *Description of similar projects delivered to other clients.*
Financial Proposal	*Specify the total cost for the development detailing breakdown for each phase and deliverable.* *Specify the total annual cost for the maintenance of the system.* *Specify daily cost for additional development work outside the scope of this RFP.*

Proposers must provide all information required under this RFP and clearly and concisely respond to all points set out in this RFP. Any proposal which does not fully and comprehensively address this RFP may be rejected. However, unnecessarily elaborate brochures and other presentations beyond those sufficient to present complete and effective proposals, are not encouraged.

Following submission of the proposals and final evaluation, the UNSSC will have the right to retain unsuccessful proposals. It is the proposer's responsibility to identify any information of a confidential or proprietary nature contained in its proposal, so that it may be handled accordingly.

NO COMMITMENT

This RFP does not commit the UNSSC to consider any proposal, to award a contract or to pay any costs incurred in the preparation or submission of proposals, or any costs incurred in making necessary studies for the preparation thereof, or to procure or contract for services or goods.

The UNSSC reserves the right to reject any or all proposals received in response to this RFP and to negotiate with any of the proposers or other firms in any manner deemed to be in the best interest of the UNSSC.

This RFP contains no contractual proposal or offer of any kind; any proposal submitted will be regarded as an offer by the proposer and not as an acceptance

by the proposer of any proposal or offer by the UNSSC. No contractual relationship will exist except pursuant to a written contract document signed by the authorized official of the Staff College and by an authorized officer of the successful proposer(s).

Rejection of Proposals

The UNSSC reserves the right to reject any proposals that, inter alia:
  i.   are received after the deadline stipulated in the RFP;
  ii.   are not properly marked or addressed as required in the RFP;
  iii. contain an alternate proposal; or
  iv.   are not otherwise in compliance with the RFP.

Ethical Standards

All UN vendors shall adhere to the highest ethical standards, both during the procurement process and throughout the performance of a contract.

Contract

The UNSSC shall enter into an agreement for the service with the highest scoring proposer in accordance with Annex C on a non-exclusive basis.

The award of the contract pursuant to the terms stated in this proposal, including its annexes, is subject to the United Nations General Conditions of Contracts (UNGCC). The applicable text of the UNGCC is available at the following address:

https://www.un.org/Depts/ptd/sites/www.un.org.Depts.ptd/files/files/attachment/page/pdf/general_condition_services.pdf

Full acceptance of the UNGCC is a mandatory requirement for the award of the contract, non-acceptance of the UNGCC may result in the rejection of the proposal.

The proposals shall be evaluated in accordance with the criteria indicated in the table below.

PRE-REQUISITE	• Valid certificate of incorporation • Full English proficiency • Minimum 5 years of experience in software development services, including database design and development.	
TECHNICAL PROPOSAL	Criterion 1: • Proposed approach to meeting the requirements, including identification of the technological solutions and security measures;	Max Score 20 points
	Criterion B: • Approach to UX/UI design; • Proposed solution to implement NLP/AI component; • Approach to user manual and instructional materials for users of the system.	Max score 20 points
	Criterion C: • Evaluation of previous similar projects with other clients.	Max 20 points
FINANCIAL PROPOSAL	• Indicate the total cost of the development; • Indicate the total yearly cost for annual maintenance; • Indicate the daily cost for development work not included in this RFP.	Max 40 points

A two-stage procedure is utilized in evaluating the submissions, with evaluation of the technical components being completed prior to any price proposals being opened and compared. The price proposal will be opened only for submissions that passed the minimum technical score of 70% (42 points) of the obtainable score of 60 points in the evaluation of the technical component.

Maximum 40 points will be given to the lowest offer and the other financial proposals will receive points inversely proportional to their financial offers. i.e. $Sf = 30 \times Fm / F$, in which Sf is the financial score, Fm is the lowest price and F the price of the submission under consideration. The weight of the technical proposal is 60% and the weight of the financial proposal is 40%.